ENVIRONMENTAL IMPACTS OF FOOD PRODUCTION

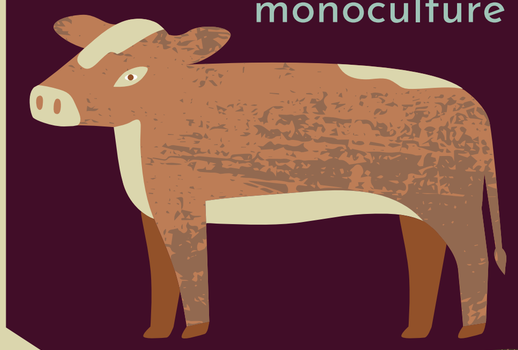
WATERLOO REGION SCHOOL FOOD GARDENS

BEFORE

- Before food production begins, natural habitats and ecosystems are destroyed to clear land
  - This type of deforestation is known as 'land-use change'
- Majority of farms use pesticides and fertilizers
  - When used, the chemicals pollute the air
    - Runoff from heavy rain transports the chemicals to other locations, polluting soil, waterways, and other ecosystems
    - Chemicals are then absorbed by simple organisms, which are eaten by larger ones, etc.
    - Results in bioaccumulation of toxic levels that can negatively impact the fertility and survival rates of species
  - Takes a lot of energy to produce, which results in reliance on fossil fuels

DURING

- Release of methane from livestock animals, who produce far more waste each year than what can be effectively utilized as manure (the rest pollutes nearby soil and waterways)
  - For example, if a single cow produces 35 kilograms of manure each day, and a farmer has a herd of 100 cattle, then that herd will produce over 1.25 million kilograms of waste each year
- Growing and harvesting crops requires a lot of nutrients, water, and energy being taken from the field
  - Especially with industrial monoculture farms



AFTER

- The substances and methods used in production, transport, and processing of our food are detrimental to the environment
  - Some produce remains in Canada to feed the population, but much more of it gets exported around the world
- More than half of the food consumed in Canada is processed or ultra-processed
- Highly processed foods require more steps in the production process, which means more energy is used.
- Imported foods use more fossil fuels when transporting over long distances.